AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions and listings of claims in the application. Please amend claims 19 and 36; and add new claims 37-46, as follows:

Claims 1-18 (Canceled).

19. (Currently Amended) A method for monitoring instantaneous behavior of a tire in a rolling condition, comprising:

acquiring and storing, at least temporarily, at least one reference curve representing an acceleration profile of at least one specified point of the tire ~~as a function of position of the at least one point~~ during at least one portion of a revolution of the tire;

continuously acquiring signals of acceleration of the at least one point during the at least one portion of a revolution;

deriving from the signals of acceleration at least one cyclic curve of acceleration of the at least one point during the at least one portion of a revolution;

comparing the at least one cyclic curve with the at least one reference curve; and

emitting a signal depending on the comparison;

wherein the at least one reference curve represents the acceleration profile of the at least one point in at least two directions,

wherein the directions comprise two or more of a centripetal direction, a tangential direction, and a lateral direction,

wherein the signals of acceleration of the at least one point in the at least two directions are continuously acquired, and

wherein the emitted signal indicates the instantaneous behavior of the tire.

20. (Previously Presented) The method of claim 19, wherein comparing the at least one cyclic curve with the at least one reference curve comprises:

comparing the at least one cyclic curve with the at least one reference curve point-by-point for an entire revolution of the tire.

21. (Previously Presented) The method of claim 19, wherein comparing the at least one cyclic curve with the at least one reference curve comprises:

comparing a cyclic curve derived from a first point on the tire with a reference curve derived from a second point on the tire.

22. (Previously Presented) The method of claim 21, wherein the first point is located on a liner surface along an equatorial plane of the tire,

wherein the second point is located on the liner surface on a shoulder of the tire, and

wherein the first and second points are located along a same meridian plane of the tire.

23. (Previously Presented) The method of claim 21, wherein the first point is located on a liner surface on a first shoulder of the tire,

wherein the second point is located on the liner surface on an opposite shoulder of the tire, and

wherein the first and second points are located along a same meridian plane of the tire.

24. (Previously Presented) The method of claim 21, wherein the first point is located on a liner surface along an equatorial plane of the tire, and

wherein the second point is located on the liner surface along the equatorial plane of the tire, and

wherein the first point is a predetermined arc distance from the second point.

25. (Previously Presented) The method of claim 19, wherein comparing the at least one cyclic curve with the at least one reference curve comprises:

comparing characteristic peaks of the at least one cyclic curve with corresponding characteristic peaks of the at least one reference curve.

26. (Previously Presented) The method of claim 19, wherein comparing the at least one cyclic curve with the at least one reference curve comprises:

comparing a portion of an area under the at least one cyclic curve with a corresponding portion of an area under the at least one reference curve.

27. (Previously Presented) A system for monitoring instantaneous behavior of a tire in a rolling condition, comprising:

at least one memory element for acquiring and storing, at least temporarily, at least one reference curve representing an acceleration profile of at least one specified point of the tire during at least one portion of a revolution of the tire;

at least one sensor associated with the at least one point for emitting, over a period of time, signals of acceleration of the at least one point;

a receiving device for continuously acquiring the signals of acceleration of the at least one point during the at least one portion of a revolution; and

an elaboration unit incorporating a program for determining from the signals of acceleration at least one cyclic curve of acceleration of the at least one point during the at least one portion of a revolution;

wherein the elaboration unit continuously compares the at least one cyclic curve with the at least one reference curve,

wherein the elaboration unit emits a signal depending on the comparison,

wherein the at least one reference curve represents the acceleration profile of the at least one point in at least two directions,

wherein the directions comprise two or more of a centripetal direction, a tangential direction, and a lateral direction,

wherein the signals of acceleration of the at least one point in the at least two directions are emitted, and

wherein the emitted signal depending on the comparison indicates the instantaneous behavior of the tire.

28. (Previously Presented) The system of claim 27, wherein a first sensor is located on a liner surface along an equatorial plane of the tire,

wherein a second sensor is located on the liner surface on a shoulder of the tire, and

wherein the first and second sensors are located along a same meridian plane of the tire.

29. (Previously Presented) The system of claim 27, wherein a first sensor is located on a liner surface on a first shoulder of the tire,

wherein a second sensor is located on the liner surface on an opposite shoulder of the tire, and

wherein the first and second sensors are located along a same meridian plane of the tire.

30. (Previously Presented) The system of claim 27, wherein a first sensor is located on a liner surface along an equatorial plane of the tire, and

wherein a second sensor is located on the liner surface along the equatorial plane of the tire, and

wherein the first sensor is a first predetermined arc distance from the second sensor.

31. (Previously Presented) The system of claim 30, further comprising:

a third sensor located on the liner surface along the equatorial plane of the tire;

wherein the second sensor is a second predetermined arc distance from the third sensor.

32. (Previously Presented) The system of claim 31, wherein the first, second, and third sensors are equidistant from each other.

33. (Previously Presented) The system of claim 28, further comprising:

a third sensor located on the liner surface on an opposite shoulder of the tire;

wherein the first, second, and third sensors are located along the same meridian plane of the tire.

34. (Previously Presented) The system of claim 27, further comprising a speed sensor of the tire.

35. (Previously Presented) The system of claim 27, further comprising a pressure sensor of the tire.

36. (Currently Amended) A pneumatic tire, comprising:

at least one sensor associated with at least one specified point of the tire;

wherein the at least one sensor emits, over a period of time, a signal representing an acceleration profile of the at least one point of the tire ~~as a function of position of the at least one point~~ during at least one portion of a revolution of the tire,

wherein the signal represents the acceleration profile in at least two directions, and

wherein the directions comprise two or more of a centripetal direction, a tangential direction, and a lateral direction.

37. (New) The method of claim 19, wherein the at least one reference curve represents an acceleration profile of at least one specified point of the tire as a function of position of the at least one point during at least one portion of a revolution of the tire.

38. (New) The pneumatic tire of claim 36, wherein the signal represents an acceleration profile of the at least one point of the tire as a function of position of the at least one point during at least one portion of a revolution of the tire.

39. (New) The pneumatic tire of claim 36, wherein a first sensor is located on a liner surface along an equatorial plane of the tire,

wherein a second sensor is located on the liner surface on a shoulder of the tire, and

wherein the first and second sensors are located along a same meridian plane of the tire.

40. (New) The pneumatic tire of claim 36, wherein a first sensor is located on a liner surface on a first shoulder of the tire,

wherein a second sensor is located on the liner surface on an opposite shoulder of the tire, and

wherein the first and second sensors are located along a same meridian plane of the tire.

41. (New) The pneumatic tire of claim 36, wherein a first sensor is located on a liner surface along an equatorial plane of the tire,

wherein a second sensor is located on the liner surface along the equatorial plane of the tire, and

wherein the first sensor is a first predetermined arc distance from the second sensor.

42. (New) The pneumatic tire of claim 41, further comprising a third sensor located on the liner surface along the equatorial plane of the tire,

wherein the second sensor is a second predetermined arc distance from the third sensor.

43. (New) The pneumatic tire of claim 42, wherein the first, second, and third sensors are equidistant from one another.

44. (New) The pneumatic tire of claim 39, further comprising a third sensor located on the liner surface on an opposite shoulder of the tire,

wherein the first, second, and third sensors are located along the same meridian plane of the tire.

45. (New) The pneumatic tire of claim 36, further comprising a sensor configured to output a signal indicative tire speed.

46. (New) The tire of claim 36, further comprising a sensor configured to output a signal indicative of tire pressure.